

## ABSTRACT

The invention provides a novel Bin1b protein, and its encoding polynucleotide. Bin1b protein is a natural antimicrobial peptide and associates to sperm maturation. The invention also  
5 discloses the preparation and uses of Bin1b protein and nucleic acid. Bin1b protein is useful to treat various diseases, e.g, urogenital infection. The invention also provides a pharmaceutical composition containing Bin1b protein.